

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026655**Date Inspected:** 01-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA**CWI Name:** Chris Concha**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006 L & R**Component:** Maintenance Travelers**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Westmont Industries (WMI) jobsite in Santa Fe Springs, California for the purpose of observing fabrication and QC functions for the SAS Superstructure, Bid Item #99, Maintenance Traveler and Bid Item #100, Maintenance Traveler (Bike Path).

SAS WB Traveler

This QA Inspector randomly observed WMI production personnel Mr. Cesar Canales WID #3195 performing layout, fitting and tack welding activities at various locations for the SAS-WB Traveler Assemblies. This QA Inspector observed Mr. Canales performing the FCAW in all positions randomly throughout the shift.

This QA Inspector randomly observed WMI production personnel Mr. Jose Rodriguez (WID # 3031) performing Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler Assemblies. This QA Inspector observed Mr. Rodriguez performing the FCAW in all positions on tube steel and plate material, randomly throughout the shift.

This QA Inspector randomly observed that Smith Emery, CWI, QC Inspector Mr. Chris Concha was present, during the above mentioned welding and fitting activities. During random observation, this QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. This QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. This QA Inspector randomly observed QC Inspector Mr. Concha verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the

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applicable WPS.

RPI Coating (Blast and Paint)

This QA Inspector performed random shop observations and observed that RPI is on site to continuing with the coating application on the E2/E3 WB Traveler. QA Inspector was informed by RPI Coating Mr. Preston Keen that RPI is going to spot blast area's that were repaired by grinding, sweep blast and apply the Sherwin Williams Zinc Clad II prime coat to section 3 and Caltrans 2ft x 2ft test plate, today, completed at 1400 hour. QA Inspector randomly observed that RPI personnel performing spot/sweep blasting activities on the E2/E3 WB Traveler. After spot/sweep blasting was completed, QA Inspector then observed Mr. Keen performing what appeared to be random surface profile checks on the sweep blasted base metal surfaces. This QA Inspector observed Mr. Keen utilizing a Testex Press-O-Film and a micrometer to perform the testing. This QA Inspector then observed Mr. Keen utilize a micrometer to measure the surface profile on the clear film part of the strip, in which the rubbing was performed. Mr. Keen explained to this QA Inspector that the initial setting on the micrometer was set at 2mils over, due to the thickness of the X-Coarse Press-O-Film paper. During observation, this QA Inspector observed that the readings appeared to be 3.0 mils, 3.1 mils, and 2.9 mils for section 3, and 3.3 mils for the Caltrans test plate. This QA Inspector noted that the contract requires a surface profile of 1.5 mils, (40 um) - 3.4mils (86um) and that the above mentioned tested profile appears to be in general compliance with the contract requirements. This QA Inspector was then informed by Mr. Keen that primer application will soon start. Later in the shift, this QA Inspector randomly observed RPI Coating performing what appeared to be primer application activities within what appeared to be within and 8 hour time frame from the above mentioned blasting activities. Environmental readings taken by RPI at the time of coating application are as follows respectively: Air Temperature 59/89 F, Relative Humidity 77/40%, Wet Bulb Temperature 55/70 F, Dew point 52/59 F and Surface Temperature 59/80 F.

Mr. Keen informed QA Inspector that on the interim coating of the Sherman Williams Zinc Clad II, Inorganic Zinc Rich prime coating he would be performing ASTM D4541 – Standard Test Method for Pull-Off Strength of Coating Using Portable Adhesion Tester, Mr. Keen stated that he will be using a calibrated Elcometer Hydraulic Adhesion Tester Model 108 for the adhesion test. Testing observed is as follows: Prime coated on 10-28-11 (section 1), Adhesion test 875 psi.

QA Inspector performed measurement on dry film thickness with Type 2 (magnetic gage), DFT's thickness reading of the prime coated section 2 coated on 10-31-11 are an average of three (3) thickness reading are as follows 4.2 mils, 5.2 mils, 3.7 mils 4.8 mils, 3.5 mils, 6.1 mils, 5.2 mils, 6.4 mils, 5.7 mils, and 5.4 mils, average dry film thickness 5.0 mils. QA Inspector also, observed Mr. Keen documenting daily actives on RPI Coating QC Daily Inspection Report.

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Summary of Conversations:

QA Inspector informed SMR Mr. Nicolai Hvass of the above information.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Brannon, Sherri	Quality Assurance Inspector
Reviewed By:	Lanz, Joe	QA Reviewer
